

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/044483 A1

(51) International Patent Classification⁷: **B21F 27/00**

(21) International Application Number:
PCT/KR2004/002864

(22) International Filing Date:
5 November 2004 (05.11.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0078507
7 November 2003 (07.11.2003) KR

(71) Applicants and

(72) Inventors: KANG, Ki Ju [KR/KR]; 604 Wolbon-li,
Daejon-myun, Damyang-gun, Chonnam 517-922 (KR).
LEE, Yong Hyun [KR/KR]; 1054-5, Woosan-dong,
Kwangsan-gu, Kwangju 506-812 (KR).

(74) Agent: LEE, Seok Yeol; 402 New Seoul Bldg., 828-8
Yeoksam-dong, Gangnam-gu, Seoul 135-935 (KR).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

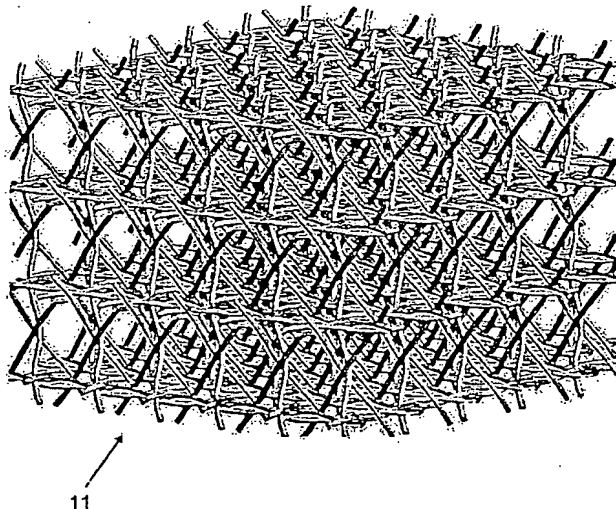
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THREE-DIMENSIONAL CELLULAR LIGHT STRUCTURES DIRECTLY WOVEN BY CONTINUOUS WIRES AND THE MANUFACTURING METHOD OF THE SAME



(57) Abstract: Disclosed herein is a three-dimensional cellular light structure formed of continuous wire groups. In the cellular light structure, six orientational-wire groups are intercrossed each other at 60 degrees or 120 degrees of angles in a three-dimensional space to thereby construct the structure similar to the ideal Octet or Kagome truss and having a good mechanical property such as strength, rigidity or the like. A method of mass-producing the structure in a cost-effective manner is also disclosed. The three-dimensional cellular light structure has a similar form to the ideal Octet or Kagome truss. When required, the intersection points of the wires are bonded by means of welding, brazing, soldering, or a liquid-or-spray-form adhesive to provide a structural material having a light weight and a good mechanical strength and rigidity, it can be made into a fiber-reinforced composite material by filling part of or entire internal empty space of the structure.

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